HEPAP TALK-FRED COOPER

I arrived on September 5 2002 to be program director for Elementary Particle Theory, Astrophysics and Cosmology.

Problems that had to be Addressed

2002-51 proposals, 22 renewals

only 9 proposals were funded

These were only funded at a substantially reduced rate

A number of proposals had not been fully reviewed (see later)

Several Students and Post-Docs were stranded

5 Year Funding History

FY	Award Amount	
2002	"$10,005,870“	10% cut disaster
2001	"$10,786,462"	
2000	"$9,999,034"	
1999	"$9,700,157"	
1998	"$9,045,205“	ITP
1997	"$7,369,912"	

Remedies Taken

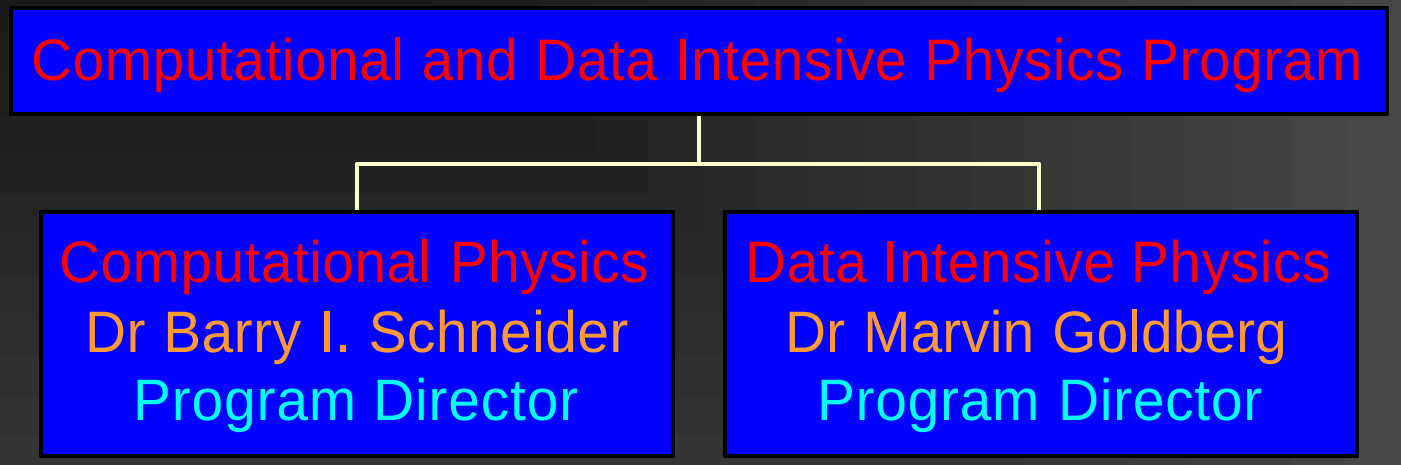
- Supplements to 2002 funded proposals requested.
- PI's encouraged to Resubmit
- All unrefereed proposals refereed by Oct.1
- Supplements given for all hardship cases

Good News for 2003

Funding expected to be better than average

New Possibilities for FUNDING--
Information Technology Research (ITR)
Computational Physics Program

A New Program in Physics



This program will support research and discovery in physics that has been enabled by the revolution in information technology. The program has two-sub areas, 1) computational physics (CP), and 2) information intensive physics (IIP). The program will enable the Physics Division to meet the challenges of 21st century information-intensive physics and capitalize on the emerging opportunities in these two fields.

Issues Needed to be Addressed

- Interesting young scientists in Lattice Gauge Theory--insuring health of the field.
- Best Strategy to fund phenomenology

  Connect- with Underground Physics Facility

A) European Model--Collaborations at universities.

B) Riken-Jefferson Lab model--5 year Assistant Professors 1/2 paid by Laboratory

C) other ideas….???

Some Ideas

- Proactive cooperation with DOE to figure out how to have a healthy program in both Lattice Theory and Phenomenology
- Need to solve High School Physics teacher monetary incentives-new NSF summer pay for high school teachers etc.
- Cooperation with NASA to use Astrophysics as a way of recruiting and exciting undergraduates in becoming Physics majors.

Challenges for HEPAP

- WHAT ARE THE MOST IMPORTANT NEEDS OF THE Community
- NSF GRADUATE FELLOWSHIPS?
- Better High School Teachers?
- Exciting Education and Research for Undergraduates
- Health of Sub-fields such as Lattice QCD
- How can the NSF help in collaboration with DOE and NASA?

Meeting with NSF Director Rita Colwell-Oct . 29, 2002

- Dr. Colwell expressed desire to help
- Wants input from PHYSICS
- Need to have a set of priorities to discuss with her!!
- Willing to consider NSF graduate Fellowship program etc. But needs guidance